

Design and Technology Curriculum Overview

Bushey Heath Primary School

Design and Technology is an inspiring, rigorous, and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing, and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising, and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth, and well-being of the nation.

Our school is a member of the Design Technology Association - <https://www.designtechnology.org.uk/>

Resources -

[DT resources](#) - OneDrive resources

<https://accessfm.com/> - Access FM

<https://www.excitededucator.com/home/access-fm-examples> - ACCESS FM examples

<https://www.designoutthebox.com/> - Project planning (adaptable)

<https://alldesign.org.uk/> - Design process

<https://www.interaction-design.org/literature/article/learn-how-to-use-the-best-ideation-methods-scamper> - SCAMPER method for idea development

<https://www.designorate.com/a-guide-to-the-scamper-technique-for-creative-thinking/> - SCAMPER method for idea development

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DT in Early Years Foundation Stage

The following statements are prerequisite skills, focussed on in EYFS to prepare our children for DT within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for DT.

The most relevant statements for DT are taken from the following areas of learning:

- Physical Development
- Expressive Arts and Design

Three- and Four-Year-Olds

Personal, Social and Emotional Development:

- Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them.

Physical Development:

- Use large-muscle movements to wave flags and streamers, paint and make marks.
- Choose the right resources to carry out their own plan.
- Use one-handed tools and equipment, for example, making snips in paper with scissors.

Understanding the World:

- Explore how things work. Expressive Arts and Design
- Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.
- Explore different materials freely, to develop their ideas about how to use them and what to make.
- Develop their own ideas and then decide which materials to use to express them.
- Create closed shapes with continuous lines and begin to use these shapes to represent objects.

Reception**Physical Development:**

- Progress towards a more fluent style of moving, with developing control and grace.
- Develop their small motor skills so that they can use a range of tools competently, safely, and confidently.
- Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.

Expressive Arts and Design:

- Explore, use and refine a variety of artistic effects to express their ideas and feelings.
- Return to and build on their previous learning, refining ideas and developing their ability to represent them.
- Create collaboratively, sharing ideas, resources and skills.

ELG**Physical Development - Fine Motor Skills:**

- Use a range of small tools, including scissors, paintbrushes, and cutlery.

Expressive Arts and Design - Creating with Material:

- Safely use and explore a variety of materials, tools, and techniques, experimenting with colour, design, texture, form, and function.
- Share their creations, explaining the process they have used.

Topic Overview

	Autumn Term	Spring Term	Summer Term
	Textiles	Product Design And Engineering	Food Technology

KS1	Year 1	Festive Bunting Cross-stitch and Appliqué	Moving Pictures Levers and Sliders	Food for life Fruit and Vegetables
	Year 2	Yuletide Puppets Cutting and Joining Techniques	Moving Vehicles Wheels and Axles	Who did it best? – School dinners, past and present Balanced Diet
LKS2	Year 3	Seasonal stockings Sewing and stitching techniques for joining and decorating fabric	Moving Monsters Pneumatics	Victorian food: What did a Victorian child eat? Eating Seasonally
	Year 4	Money Containers Sewing and stitching techniques, Fastenings	Clocks CAD/CAM	Roman Recipes: rich or poor? Dietary Considerations What could be healthier?
UKS2	Year 5	Drawstring Bags Block Printing, sewing machines	Musical Cards Electronic circuits and components	Vikings: The conquerors diet Sensory Exploration
	Year 6	Leavers T-Shirts CAD/CAM - Sublimation printing and heat press	Fairground Rides DC motor, cams, pulleys, gears, wheels, axels, and pneumatics	Rationing: War Time Recipes Adapting a recipe

Year 1

Design and Technology is an inspiring, rigorous, and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing, and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising, and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth, and well-being of the nation.

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	Festive Bunting (Textiles)	Moving Pictures (PD and E)	Food For Life (Food Technology)
Knowledge Area of Focus	To acquire foundational knowledge of basic textile materials and techniques, such as cutting, sewing, and decorating fabrics. To foster creativity and fine motor skills as children design and construct their own	To develop an understanding of simple mechanisms through designing and making moving pictures. To develop their understanding of how movement can be created by investigating everyday products and	To develop an understanding of designing and making with food and the importance of healthy eating. To make choices based on the properties of different fruit and vegetables in order to design and make a product for a particular occasion

	personalised bunting, emphasising the importance of individual expression and craftsmanship.	making simple levers and sliders from given examples.	To investigate and taste different foods and develop vocabulary to describe the appearance, taste, smell and texture.
Skills	<ul style="list-style-type: none"> Develop basic cutting skills using child-safe scissors to shape fabric pieces for the bunting. Introduce simple hand-sewing techniques to attach fabric pieces together securely. Enhance fine motor coordination by handling small fabric pieces, threading needles, and making precise stitches. Identify and use a variety of colours to create visually appealing bunting designs. Explore basic patterns in fabric selection and arrangement. 	<ul style="list-style-type: none"> Use tools safely to make a moving picture that incorporates a simple lever or slider; e.g., hole punch, paper fastener, join, cut carefully, Use given techniques to practise making skills and as a starting point for developing own ideas. Talk about how simple moving products work Make simple judgements about their work e.g. 'The lever is a bit floppy, but I could stiffen it with a lolly stick', 'I am pleased with the way the boat moves but sometimes it gets stuck'; have been able to explain how the lever or slider works and will have recorded through drawing and labelling. 	<ul style="list-style-type: none"> Gain an understanding of a range of fruit and vegetables, including taste, texture and appearance. Recognise that it is important to eat more fruit and vegetables Prepare and combine ingredients into a specific product; by using basic tools safely. Begin to justify their choices as they design and make their product.
Vocabulary	Cutting, Sewing, Fabric, Bunting, Colours, Patterns, Design, Scissors, Needle, Fine Motor, Creativity, Problem-Solving, Instructions, Detail, Expressive Language, Collaboration, Patience, Critical Thinking, Safety, Craftsmanship, Shapes, Arrangement, Hand-Sewing, Thread, Personalized, Imagination, Pride.	Designing, idea, discuss, choose, drawing, labelling, making, moving, handle, lever, pivot, pull, push, slider, direction, blade, metal, balance, movement, forward, backwards, order, sequence, length	Designing, choosing, investigating, tasting, arranging, experimenting, popular, sort, block graph, pictogram · making e.g., washing, cleaning, peeling, cutting, slicing, grating · salad, fruit, vegetables, peel, flesh, skin, grater, chopping board, peeler, seeds, pips, stalk, juice, root, leaf, stone, bunch - sensory e.g., crisp, sharp, juicy, sweet, sour, sticky, squashy, smooth, crunchy, scented, waxy
Concepts	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, and a range of materials, including food.</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, and a range of materials, including food.</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, and a range of materials, including food.</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p>

	<p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • The ability to use time efficiently and work constructively and productively with others. • The ability to manufacture products safely and hygienically. 	<p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • The ability to use time efficiently and work constructively and productively with others. • The ability to manufacture products safely and hygienically. 	<ul style="list-style-type: none"> • The ability to use time efficiently and work constructively and productively with others. • The ability to manufacture products safely and hygienically. 	
<p>Lesson 1 - Design</p> <p>Design Brief & Task Analysis</p>	<p><i>Design Brief – Santa and his cheerful Elves are getting ready to transform their workshop into a festive wonderland for Christmas, and they've realised they're in need of some merry decorations! Your mission is to design and create Christmas-themed bunting that Santa and his Elves can use to adorn their workshop. Each piece of bunting should radiate holiday joy with vibrant Christmas colours and delightful festive imagery. Get creative with your designs, incorporating classic symbols of the season like reindeer, ornaments, and jolly old St. Nick. Your bunting should showcase your skill using a simple sewing stitch. Get ready to deck the halls with your festive bunting creations!</i></p> <p>To understand the Design Brief and analyse the task.</p> <ul style="list-style-type: none"> • Children will be introduced to the concept of designing for a purpose. • Awareness of the Design Brief will be introduced in a simplified manner. • Children will start with basic considerations, such as imagining what their product could look like. • Initial understanding of who might use the product will be explored. • See ACCESS FM 	<p><i>Design Brief – The Easter Bunny and his Bunny Helpers have hopped into a situation at Bushey Heath Primary school – they've run out of Easter cards for all the children and need your assistance! Your task is to design and create a new Easter card with a delightful moving part, also known as a mechanism. The card should feature a vibrant Easter-themed image on the front and reveal a special Easter message when opened. Get ready to bring some springtime magic to your designs and make this Easter extra special for the children at Bushey Heath Primary!</i></p> <p>To understand the Design Brief and analyse the task.</p> <ul style="list-style-type: none"> • Children will be introduced to the concept of designing for a purpose. • Awareness of the Design Brief will be introduced in a simplified manner. • Children will start with basic considerations, such as imagining what their product could look like. • Initial understanding of who might use the product will be explored. • See ACCESS FM 	<p>Lesson 1 – Research</p> <p>Research ingredients</p>	<p>To research fruit, vegetables and other ingredients to promote healthy eating choices.</p> <ul style="list-style-type: none"> • Children will identify and categorise various foods into groups such as fruits, vegetables, grains, proteins, and dairy. • Children will demonstrate an understanding of why it is important to eat a variety of fruits, vegetables, and other healthy ingredients for overall well-being. • Children will relate the information learned to personal experiences, discussing favourite fruits or vegetables and their nutritional benefits.
<p>Lesson 2 - Evaluate</p>	<p>To explore and evaluate a range of existing products</p>	<p>To explore and evaluate a range of existing products</p>	<p>Lesson 2 – Research</p> <p>Research Recipes</p>	<p>To learn a range of recipes using fruit and vegetables to</p>

<p>Explore and evaluate existing products</p>	<ul style="list-style-type: none"> • Children will be introduced to the concept of exploring existing products. • Exploration will focus on basic understanding and recognition of products related to their Design Brief. • Children will engage in basic evaluation, identifying simple features or aspects of existing products that align with their initial understanding of the Design Brief. • Evaluation criteria will be kept simple, perhaps focusing on visual aspects and basic functionalities. 	<ul style="list-style-type: none"> • Children will be introduced to the concept of exploring existing products. • Exploration will focus on basic understanding and recognition of products related to their Design Brief. • Children will engage in basic evaluation, identifying simple features or aspects of existing products that align with their initial understanding of the Design Brief. • Evaluation criteria will be kept simple, perhaps focusing on visual aspects and basic functionalities. 		<p>promote healthy eating choices.</p> <ul style="list-style-type: none"> • Children will use age-appropriate resources, such as simple cookbooks or online platforms, to research and identify existing recipes that incorporate a variety of fruits and vegetables. • Children will comprehend basic nutritional information associated with the researched recipes, including the benefits of using specific fruits and vegetables in promoting a healthy diet. • Children will work collaboratively to present their researched recipes to the class, explaining the importance of the chosen ingredients and how the dish contributes to a balanced and healthy diet.
<p>Lesson 3 – Technical Knowledge</p> <p>Practise and apply a skill/technique</p>	<p>To practise and apply techniques</p> <ul style="list-style-type: none"> • Children will explore and learn simple sewing and joining techniques to join bunting fabric. 	<p>To practise and apply techniques</p> <ul style="list-style-type: none"> • Children will explore and use mechanisms [for example, levers, sliders, wheels and axles], to use in the design of their products. 	<p>Lesson 3 – Research</p> <p>Food Hygiene</p>	<p>To understand the importance of food hygiene</p> <ul style="list-style-type: none"> • Children will demonstrate the correct technique for washing their hands before handling food, emphasising the importance of cleanliness, and reducing the risk of germs.

				<ul style="list-style-type: none"> • Children will be able to identify and differentiate between safe and unsafe food handling practices, understanding the importance of keeping food and cooking utensils clean to prevent contamination. • Children will engage in role-playing activities, showcasing hygienic food preparation practices such as using aprons, tying back hair, and avoiding touching their faces during cooking, demonstrating an understanding of maintaining a clean cooking environment.
Lesson 4 - Design Design Specification and Design Idea	To create design criteria and final design idea. <ul style="list-style-type: none"> • Children will begin creating simple design criteria, focusing on basic aspects of purpose and functionality. • Initial design ideas will reflect a basic understanding of the Design Brief, with an emphasis on simplicity and functionality. • Children will communicate their ideas through simple methods such as talking and basic drawings. • The emphasis will be on basic communication skills to express the intended purpose and functionality of their product. 	To create design criteria and final design idea. <ul style="list-style-type: none"> • Children will begin creating simple design criteria, focusing on basic aspects of purpose and functionality. • Initial design ideas will reflect a basic understanding of the Design Brief, with an emphasis on simplicity and functionality. • Children will communicate their ideas through simple methods such as talking and basic drawings. • The emphasis will be on basic communication skills to express the intended purpose and functionality of their product. 	Lesson 4 – Plan Plan a recipe with instructions and ingredients and equipment.	To design a recipe using healthy ingredients including fruit and/or vegetables. <ul style="list-style-type: none"> • Children will design a recipe that includes a variety of healthy ingredients, with a specific focus on incorporating fruits and/or vegetables, demonstrating an understanding of the importance of diverse nutrients in a balanced diet. • Children will create a simple and clear recipe format that includes a list of ingredients and step-by-step instructions,

				<p>ensuring that the recipe is easy to follow and appropriate for their age group.</p> <ul style="list-style-type: none"> • Children will provide a brief explanation or justification for their choice of ingredients, emphasising the nutritional benefits of including specific fruits and/or vegetables in their recipe to promote healthy eating habits.
<p>Lesson 5 - Make</p> <p>Product manufacture</p>	<p>To manufacture a product.</p> <ul style="list-style-type: none"> • Children will begin to explore and select basic tools and equipment to manufacture a simple product. • Children will start to identify and use a limited range of materials and components in their manufacturing process. • Children will be introduced to the concept of making a product using age-appropriate tools and materials. 	<p>To manufacture a product.</p> <ul style="list-style-type: none"> • Children will begin to explore and select basic tools and equipment to manufacture a simple product. • Children will start to identify and use a limited range of materials and components in their manufacturing process. • Children will be introduced to the concept of making a product using age-appropriate tools and materials. 	<p>Lesson 5 – Make</p> <p>Make a recipe</p>	<p>To make a recipe using healthy ingredients including fruit and/or vegetables.</p> <ul style="list-style-type: none"> • Children will demonstrate safe and hygienic food handling practices, including handwashing before cooking, using clean utensils, and maintaining a clean cooking area. • Children will successfully follow the steps of their planned recipe, incorporating healthy ingredients, such as fruits and/or vegetables, in the correct order to create a nutritious dish. • Children will taste and evaluate the final dish, expressing their thoughts on its flavour and texture.

<p>Lesson 6 - Evaluate</p> <p>Product evaluation</p>	<p>To evaluate a product against design criteria</p> <ul style="list-style-type: none"> Children will be introduced to the concept of evaluating their own manufactured product against simple design criteria. Children will begin to understand the importance of considering feedback from peers to improve their product. 	<p>To evaluate a product against design criteria</p> <ul style="list-style-type: none"> Children will be introduced to the concept of evaluating their own manufactured product against simple design criteria. Children will begin to understand the importance of considering feedback from peers to improve their product. 	<p>Lesson 6 – Evaluate</p> <p>Final dish evaluation</p>	<p>To evaluate a created dish using fruit and/or vegetables to promote healthy eating</p> <ul style="list-style-type: none"> Children will observe and describe the appearance, taste, and texture of the created dish, using descriptive language to express their thoughts about the inclusion of fruits and/or vegetables. Children will engage in a discussion about the nutritional benefits of the dish, specifically focusing on how the fruits and/or vegetables contribute to a healthy and balanced diet. Children will express their personal preferences regarding the dish, indicating whether they enjoyed it and if they would choose to include similar ingredients in future recipes to promote healthy eating.
<p>Resources</p>	<p>Fabric, Scissors, Thread, Needle, Hole Punch, Paper Fasteners, Templates, Glue, Ribbons, Markers, Pencils, Paper, Craft Paper, Safety Scissors, Safety Needles, Cutting Mat, Iron (for fabric preparation), Buttons, Beads, Glitter, Stencils, Fabric Scraps, Lolly Sticks, Craft Glue, Felt Sheets, Velcro, Craft Tray, Storage Containers.</p>	<p>A selection of products with moving parts e.g., scissors, balances, storybooks, badges, puppets, cards · a selection of favourite storybooks · disposable pictures which can be cut up for experimentation · paper, card, pre-cut strips of card · paper fasteners, masking tape, glue, plier punch or single-hole punch, scissors, Stanley knives · a selection of coloured papers, pens, paints · construction kits</p>	<p>A range of fruit and vegetables (including some unusual fruit/vegetables) · plates, dishes, bowls, peeler, grater, chopping board, plastic mixing bowls, vegetable knives, forks, spoons · plastic table covers, antibacterial cleaner, access to hand-washing and washing-up facilities, aprons</p>	

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	Yuletide Puppets (Textiles)	Moving Vehicles (PD and E)	Who did it best? – School dinners, past and present (Food Technology)
Knowledge Area of Focus	<p>To make a textile product by marking out, cutting and joining pieces of fabric.</p> <p>To look at a selection of hand puppets and base their design on their investigations into how the puppets have been made and who they have been designed for.</p> <p>To develop design ideas based on focused research and design brief.</p>	<p>To experience joining and combining sheet and reclaimed materials and of using moving joints.</p> <p>To learn about wheels and axles and how to use these when making wheeled vehicles for a specific purpose.</p> <p>To develop design ideas based on investigating vehicles in the world around them.</p> <p>To use construction kits, and computer-generated graphics or text to enhance their finished products, to apply basic measuring skills and to draw on knowledge of forces from science.</p>	<p>To understand the nutritional value of different ingredients commonly used in school dinners.</p> <p>To learn to make informed choices about balanced and healthy meals, emphasizing the importance of a nutritious diet for overall well-being.</p> <p>To develop fundamental cooking skills such as chopping, slicing, and basic food preparation techniques.</p>
Skills	<p>To learn to use basic sewing techniques</p> <p>To use a template to mark out identical pieces of fabric</p> <p>To compare joining techniques</p> <p>To use simple vocabulary associated with the use of textiles</p>	<p>To gain an understanding of how simple mechanisms related to moving vehicles work.</p> <p>To clarify ideas through discussion.</p> <p>To make a wheeled vehicle which moves and which generally matches design intention.</p>	<p>To develop proficiency in basic food preparation techniques, including chopping, slicing, and dicing.</p> <p>To acquire essential cooking skills such as sautéing, boiling, and baking.</p> <p>To practice the ability to follow recipes, reinforcing reading and comprehension skills</p>
Vocabulary	Designing, user, list, label, drawing, ideas, mock-up, choose, decide, evaluate, try out ideas, standard unit · making e.g.,	Designing, purpose, ideas, discuss, explore, predict, guess, survey, table, Venn diagram, most/least common ·	Nutritional, Ingredients, Balanced Diet, Cooking, Food Preparation, Chopping, Slicing, Dicing, Sauteing, Boiling, Baking, Recipes, Culinary, Diversity,

	plan, template, fabric, cutting out, sewing, needle, running stitch, gluing, adding · knowledge and understanding, e.g., character, puppet, seam, stitch, thread, strong, quality, features, strengthen, reflective symmetry, position, to, towards	making, joining, combining, connecting, testing, punching, vehicle, wheels, chassis, axles, doweling, hole punch, logo, distance	Flavour, Texture, Cultural, Traditions, Preferences, Hands-on, Wholesome, Proficiency, Comprehension.
Concepts	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop a knowledge of users' needs. • The ability to manufacture products safely and hygienically. 	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop a knowledge of users' needs. • The ability to manufacture products safely and hygienically. 	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop a knowledge of users' needs. • The ability to manufacture products safely and hygienically.
Lesson 1 – Design Design Brief & Task Analysis	<i>Design Brief – Santa's workshop is buzzing with excitement, and we need your help to design festive Christmas-themed textile puppets. Your task is to craft charming puppets that capture the magic of the holiday season. You should explore various Christmas characters, from reindeer to snowmen and, of course, jolly old St. Nick himself! The puppets should be not only look delightful but also suitable for storytelling and imaginative play. Your</i>	<i>Design Brief – Our local supermarket is in need of your inventive skills to develop a fleet of Moving Vehicles using wheels and axles. Your task is to design efficient and practical vehicles that can transport boxes of food within the supermarket premises. You should design your vehicle considering factors such as size, manoeuvrability, and capacity to carry food items. The designs should utilise wheels and axles for seamless movement,</i>	Lesson 1 – Research Research ingredients To research ingredients common in school dinners from the past and present. <ul style="list-style-type: none"> • Children will research and identify a range of ingredients commonly used in school dinners both in the past and present and understand the historical context of

	<p><i>puppet should be made of a suitable material, and you should explore a simple sewing technique to attach it all together! Happy crafting and let the holiday magic unfold!</i></p> <p>To understand the Design Brief and analyse the task.</p> <ul style="list-style-type: none"> Continued emphasis on designing for a purpose as children will delve deeper into the importance of the Design Brief. Children will progress to analysing the task against the Design Brief, considering factors like size, potential users, and safety issues. Children will expand their considerations to include aspects like the size of the product, potential users, and safety issues. Children will explore ideas for the product's appearance and functionality, fostering a creative approach to design. 	<p><i>providing a reliable solution for the supermarket's logistical needs. Roll into action and let your design and engineering skills drive this innovative project to success!</i></p> <p>To understand the Design Brief and analyse the task.</p> <ul style="list-style-type: none"> Continued emphasis on designing for a purpose as children will delve deeper into the importance of the Design Brief. Children will progress to analysing the task against the Design Brief, considering factors like size, potential users, and safety issues. Children will expand their considerations to include aspects like the size of the product, potential users, and safety issues. Children will explore ideas for the product's appearance and functionality, fostering a creative approach to design. 		<p>school meals, recognising how ingredients have evolved over time.</p> <ul style="list-style-type: none"> Children will critically analyse and compare ingredients used in school dinners from the past and present, identifying any patterns, shifts, or improvements, and provide insights into how changes in ingredients may reflect broader societal or nutritional considerations.
<p>Lesson 2 - Evaluate</p> <p>Explore and evaluate existing products</p>	<p>To explore and evaluate a range of existing products</p> <ul style="list-style-type: none"> Continued emphasis on exploration as children will further explore a wider range of existing products related to their Design Brief. Children will begin to recognise a variety of products and their features. Children will deepen their evaluation skills, considering more nuanced aspects of existing products that align with their Design Brief. 	<p>To explore and evaluate a range of existing products</p> <ul style="list-style-type: none"> Continued emphasis on exploration as children will further explore a wider range of existing products related to their Design Brief. Children will begin to recognise a variety of products and their features. Children will deepen their evaluation skills, considering more nuanced aspects of existing products that align with their Design Brief. 	<p>Lesson 2 – Research</p> <p>Research Recipes</p>	<p>To learn a range of recipes inspired by primary school dinners.</p> <ul style="list-style-type: none"> Children will succeed by learning a range of recipes inspired by primary school dinners, showcasing their understanding of various culinary options reminiscent of traditional school meals.

	<ul style="list-style-type: none"> Evaluation criteria will become more sophisticated, incorporating considerations beyond surface features. Children will start comparing different existing products to identify strengths and weaknesses. Comparative analysis will be introduced to foster a deeper understanding of product qualities. 	<ul style="list-style-type: none"> Evaluation criteria will become more sophisticated, incorporating considerations beyond surface features. Children will start comparing different existing products to identify strengths and weaknesses. Comparative analysis will be introduced to foster a deeper understanding of product qualities. 		<ul style="list-style-type: none"> Success will be evident through the documentation of researched recipes, including key details such as ingredients, cooking methods, and cultural or historical influences. Children will achieve success by critically comparing and contrasting various primary school dinner-inspired recipes, identifying common elements, regional variations, and potential adaptations for a broader culinary understanding.
<p>Lesson 3 – Technical Knowledge</p> <p>Practise and apply a skill/technique</p>	<p>To practise and apply techniques</p> <ul style="list-style-type: none"> Children will explore and use a range of sewing and joining skills and techniques. 	<p>To practise and apply techniques</p> <ul style="list-style-type: none"> Children will explore and use mechanisms [for example, levers, sliders, wheels and axles], to use in the design of their products. 	<p>Lesson 3 – Research</p> <p>Food Hygiene</p>	<p>To understand the importance of food hygiene</p> <ul style="list-style-type: none"> Children will demonstrate the correct technique for washing their hands before handling food, emphasising the importance of cleanliness to reduce the risk of germs. They will showcase an increased awareness of the significance of proper hand hygiene in maintaining food safety. Children will show an advanced ability to identify and differentiate between safe and unsafe food handling practices.

				<p>They will understand the importance of keeping both food and cooking utensils clean to prevent contamination, displaying a heightened awareness of food safety measures.</p> <ul style="list-style-type: none"> Children in Year 2 will engage in role-playing activities that highlight hygienic food preparation practices, such as using aprons, tying back hair, and avoiding touching their faces during cooking. They will demonstrate an enhanced understanding of maintaining a clean cooking environment, showcasing increased mastery and responsibility in their role-playing scenarios.
<p>Lesson 4 - Design</p> <p>Design Specification and Design Idea</p>	<p>To create design criteria and final design idea.</p> <ul style="list-style-type: none"> Children will refine their design criteria to include more detailed considerations, aligning them with their research findings and the Design Brief. Design ideas will evolve to reflect a deeper understanding of purpose, functionality, and aesthetic appeal. Children will enhance their idea communication skills, incorporating more detailed drawings and potentially utilizing basic information and communication technology. 	<p>To create design criteria and final design idea.</p> <ul style="list-style-type: none"> Children will refine their design criteria to include more detailed considerations, aligning them with their research findings and the Design Brief. Design ideas will evolve to reflect a deeper understanding of purpose, functionality, and aesthetic appeal. Children will enhance their idea communication skills, incorporating more detailed drawings and potentially utilizing basic information and communication technology. 	<p>Lesson 4 – Plan</p> <p>Plan a recipe with instructions, ingredients and equipment.</p>	<p>To design a recipe using ingredients found in a school dinner.</p> <ul style="list-style-type: none"> Children will showcase their imagination by designing a simple recipe using ingredients commonly found in a school dinner, demonstrating an understanding of basic flavour combinations and nutritional concepts.

	<ul style="list-style-type: none"> • Communication methods will expand to include more sophisticated visuals and, where appropriate, basic technology. 	<ul style="list-style-type: none"> • Communication methods will expand to include more sophisticated visuals and, where appropriate, basic technology. 		<ul style="list-style-type: none"> • Children in Year 2 will demonstrate the ability to choose appropriate ingredients and basic cooking utensils for their designed recipe. They will consider the availability of school dinner ingredients and showcase an understanding of using simple equipment for cooking. • Children will effectively present and explain their designed recipes, emphasising simple communication of the recipe's components, basic preparation steps, and the reasons behind their ingredient and equipment choices. Success will be evident through a clear demonstration of understanding.
Lesson 5 - Make Product manufacture	To manufacture a product. <ul style="list-style-type: none"> • Children will advance their skills by selecting and using a broader range of tools and equipment for manufacturing purposes. • Children will have the opportunity to choose from a wider array of materials and components, allowing for more creativity in their product creation. • Children will continue to develop their understanding of the manufacturing process through hands-on 	To manufacture a product. <ul style="list-style-type: none"> • Children will advance their skills by selecting and using a broader range of tools and equipment for manufacturing purposes. • Children will have the opportunity to choose from a wider array of materials and components, allowing for more creativity in their product creation. • Children will continue to develop their understanding of the manufacturing process through hands-on 	Lesson 5 – Make Make a recipe	To make a recipe using ingredients found in a school dinner. <ul style="list-style-type: none"> • Children will demonstrate their culinary skills by successfully making a recipe using ingredients commonly found in a school dinner, following the plans they created in the previous lesson.

	<p>experiences with various tools and materials.</p>	<p>experiences with various tools and materials.</p>		<ul style="list-style-type: none"> • Children will showcase their ability to use selected ingredients and basic cooking utensils effectively. They will follow their designed plans, demonstrating understanding in executing the cooking process with simple equipment. • Children will present their completed recipes, emphasising clear communication of the cooking steps taken, showcasing their understanding of the sequential process.
<p>Lesson 6 – Evaluate</p> <p>Product evaluation</p>	<p>To evaluate a product against design criteria</p> <ul style="list-style-type: none"> • Children will develop the skill of evaluating their manufactured product against more defined design criteria. • Children will actively seek and consider feedback from peers, recognizing the value of different perspectives in improving their work. 	<p>To evaluate a product against design criteria</p> <ul style="list-style-type: none"> • Children will develop the skill of evaluating their manufactured product against more defined design criteria. • Children will actively seek and consider feedback from peers, recognizing the value of different perspectives in improving their work. 	<p>Lesson 6 – Evaluate</p> <p>Final dish evaluation</p>	<p>To evaluate a cooked dish using ingredients found in a school dinner.</p> <ul style="list-style-type: none"> • Children will demonstrate their ability to critically evaluate a dish created using ingredients commonly found in a school dinner. They will consider taste, texture, and presentation, showcasing thoughtful analysis and constructive feedback. • Children will articulate their evaluations clearly, using age-appropriate language to express their thoughts on the taste, appearance, and overall satisfaction with the dish.

				<p>They will demonstrate their understanding of evaluating food.</p> <ul style="list-style-type: none"> Children will showcase reflective learning by identifying aspects they enjoyed in the dish and suggesting potential improvements. Success will be evident through the ability to provide insightful feedback on their own and others' creations.
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Resources	<p>Examples or pictures of a variety of finger and hand puppets from a range of cultures · fabric for learning sewing techniques e.g., plastic mesh, binca, hessian · fabric for puppets, preferably non-fraying e.g., felt, dipryl (which is used for making disposable cloths) · doweling · templates, fabric scissors · needles, thread, fabric glue, stapler · felt-tip pens, wool, sequins, buttons, small pieces of fabric to use as features for the puppets</p>	<p>Toy vehicles, models, pictures of vehicles, video of vehicles moving · various types of wheels, including wooden and plastic wheels, cotton reels and card discs · collage materials · straws, doweling and plastic tubing, reclaimed boxes, card, clothes pegs, single-hole punch or card punch, thin corrugated plastic sheet, hand saws, simple jigs for holding materials · computer and printer with paint, draw or graphics programs</p>	<p>Cooking Utensils, Cutting Boards, Chef's Knives, Pots, Pans, Baking Sheets, Mixing Bowls, Measuring Cups, Recipe Cards, Cooking Ingredients, Fresh Produce, Herbs, Spices, Cooking Oil, Stovetop, Oven, Food Processor, Blender, Nutritional Charts, Cooking Books, Educational Videos, Culinary Experts, Classroom Kitchen, Storage Containers, Aprons.</p>
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Year 3

Design and Technology is an inspiring, rigorous, and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing, and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising, and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth, and well-being of the nation.

Intent: To build on the National Curriculum by adapting and extending to suit our children. An inspiring and exciting curriculum ensures that Bushey Heath provides a Design Technology curriculum which is as rigorously applied as core.

	Seasonal Stockings (Textiles)	Moving Monsters (PD and E)	Victorian food: What did a Victorian family eat? (Food Technology)
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<p>Knowledge Area of focus</p>	<ul style="list-style-type: none"> To explore and apply a variety of textile techniques, such as stitching, embroidery, and fabric manipulation, to create seasonal stockings. To investigate and understand different seasonal themes, including the symbols and colours associated with various seasons. To emphasise the importance of design thinking and creativity in the project. 	<ul style="list-style-type: none"> To develop children's understanding of control through investigating simple pneumatic systems and designing and making a model of a monster that has moving parts controlled by pneumatics. This could be linked to stories or poems, or another purpose. A good context is toys to amuse children who are ill in bed. The designing and making assignment require children to develop skills in working as part of a team. 	<ul style="list-style-type: none"> To delve into the historical context of Victorian food, understanding the ingredients, cooking methods, and culinary traditions prevalent during the Victorian era, focussing on the Victorian family. To focus on developing foundational culinary techniques inspired by Victorian cooking methods. To explore the cultural and social significance of Victorian food, considering the role of food in daily life, celebrations, and societal norms during the Victorian era, focussing on the Victorian family.
<p>Skills</p>	<ul style="list-style-type: none"> To develop proficiency in basic textile crafting skills, including cutting, stitching. To acquire embroidery skills to add intricate details and embellishments. To learn the art of pattern making to ensure the stockings are well-structured and appropriately sized, demonstrating precision and attention to detail in the crafting process. 	<ul style="list-style-type: none"> To think about ideas and make progress and be willing to change things if this helps them to improve their work To plan through discussion To work safely and accurately with a range of simple hand tools To use a storyboard to record the sequence of their work To evaluate as a team the product and purpose of improvements 	<ul style="list-style-type: none"> To develop research skills to explore and understand the historical context of Victorian food, including the ingredients, recipes, and cultural influences of that era. To acquire practical culinary skills by learning and applying traditional Victorian cooking techniques. Cultivate the skill of planning and designing Victorian-inspired menus, considering the availability of ingredients and the culinary preferences of that historical period.
<p>Vocabulary</p>	<p>Textile, Techniques, Stitching, Embroidery, Fabric Manipulation, Seasonal, Stockings, Themes, Symbols, Colours, Design, Creativity, Crafting, Cutting, Decorative Elements, Embellishments, Colour Coordination, Visual Appeal, Harmonious Designs, Pattern Making, Precision, Attention to Detail.</p>	<p>Designing brainstorm, suggestion, evaluate, ideas, constraints, appropriate, graph, data, sort, order, set, label, title, list, probable, possible, impossible · making e.g., planning, storyboard, components, fixing, tubing, syringe, attaching, finishing · knowledge and understanding e.g., control, pneumatic system, pressure, inflate, deflate, input, output, pump, hinge, fastest, slowest, often</p>	<p>Designing texture, taste, appearance, healthy, preference, criteria, cost, questionnaire, data, frequency diagram · making e.g., cut, mix, spread, slice, blend, grate, chop, chopping board, knife, grater · knowledge and understanding e.g., sandwich, filling, ingredients, fridge, food groups, hygiene, high risk, healthy eating, 'balanced plate', thick, thin - sensory e.g., sweet, sour, bitter, salty</p>
<p>Concepts</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources, to improve the world around them</p>

	<p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • The ability to manufacture products safely and hygienically. 	<p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • The ability to manufacture products safely and hygienically. 	<p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • The ability to manufacture products safely and hygienically.
<p>Lesson 1 – Design</p> <p>Design Brief & Task Analysis</p>	<p><i>Design Brief – 'Tis the season for a delightful project! Santa is looking for your creative talents to design and craft seasonal stockings for presents. The objective is to create charming stockings that capture the essence of each season. You are encouraged to choose a specific season as inspiration, incorporating relevant elements such as snowflakes, flowers, suns, or leaves. The stockings should not only be visually appealing but also provide a practical and festive vessel for holding presents. Ho, ho, ho! Let the jolly designing and crafting begin!</i></p>	<p><i>Design Brief – A local toy store is seeking your innovative talents to create an exciting range of Moving Monster toys using pneumatics. Your task is to design a toy that not only captivates young minds but also showcases the fascinating principles of a pneumatic mechanism in action. Let your imagination run wild and create a friendly or fearsome monster toy that come to life through a pneumatic mechanism. Unleash your creativity and engineering prowess to bring these playful monsters to life!</i></p>	<p>Lesson 1 – Research</p> <p>Research ingredients</p> <p>To research ingredients used in Victorian cooking, focussing on the Victorian family.</p> <ul style="list-style-type: none"> • Children will conduct thorough research on ingredients commonly used in Victorian cooking, showcasing an understanding of historical culinary practices and ingredients prevalent during that era, focussing on the Victorian child.

	<p>To understand the Design Brief and analyse the task.</p> <ul style="list-style-type: none"> Children will further refine their ability to analyse tasks against the Design Brief, considering more advanced aspects of size, users, safety, and functionality. As children advance, their ability to analyse tasks against the Design Brief will become more refined, including considerations of size, users, safety, and functionality. The ACCESSFM method will be introduced, emphasising that children will consider Aesthetics, Cost, Customer, Environment, Size, Safety, Function, and Materials. Children will learn to integrate the ACCESSFM method into their design thinking, ensuring a comprehensive consideration of different elements. 	<p>To understand the Design Brief and analyse the task.</p> <ul style="list-style-type: none"> Children will further refine their ability to analyse tasks against the Design Brief, considering more advanced aspects of size, users, safety, and functionality. As children advance, their ability to analyse tasks against the Design Brief will become more refined, including considerations of size, users, safety, and functionality. The ACCESSFM method will be introduced, emphasising that children will consider Aesthetics, Cost, Customer, Environment, Size, Safety, Function, and Materials. Children will learn to integrate the ACCESSFM method into their design thinking, ensuring a comprehensive consideration of different elements. 		<ul style="list-style-type: none"> Children will present their research findings in a clear and organised manner. This involves using appropriate visuals or illustrations to enhance their presentation and effectively communicating the information to their peers. Children will connect their research on Victorian ingredients to the historical context of the time. They should be able to discuss how societal factors influenced ingredient choices in Victorian cooking and provide relevant insights into the era's culinary practices, focussing on the Victorian child.
<p>Lesson 2 - Evaluate</p> <p>Explore and evaluate existing products</p>	<p>To explore and evaluate a range of existing products</p> <ul style="list-style-type: none"> Children will engage in advanced exploration, seeking out a diverse and extensive range of existing products. Children will develop a more discerning eye for various design solutions. Children will refine their evaluation skills, critically analysing the design, functionality, and materials of existing products in relation to their Design Brief. 	<p>To explore and evaluate a range of existing products</p> <ul style="list-style-type: none"> Children will engage in advanced exploration, seeking out a diverse and extensive range of existing products. Children will develop a more discerning eye for various design solutions. Children will refine their evaluation skills, critically analysing the design, functionality, and materials of existing products in relation to their Design Brief. 	<p>Lesson 2 – Research</p> <p>Research Recipes</p>	<p>To research Victorian family recipes using ingredients available in that era.</p> <ul style="list-style-type: none"> Children will conduct comprehensive research on Victorian family recipes, exploring ingredients available during that era, identifying authentic recipes and understanding the historical context of ingredient availability. Children will document their research findings in an organised manner. They will

	<ul style="list-style-type: none"> • The evaluation process will become more sophisticated, incorporating a deeper understanding of design principles and user needs. • Children will learn to integrate their findings from exploring and evaluating existing products into their design process, aligning them with the Design Brief. • The connection between the exploration of existing products and the Design Brief will be emphasised, guiding the children in applying their insights to their own design solutions. 	<ul style="list-style-type: none"> • The evaluation process will become more sophisticated, incorporating a deeper understanding of design principles and user needs. • Children will learn to integrate their findings from exploring and evaluating existing products into their design process, aligning them with the Design Brief. • The connection between the exploration of existing products and the Design Brief will be emphasised, guiding the children in applying their insights to their own design solutions. 		<p>use clear and concise language, detailing key ingredients, cooking methods, and any historical insights discovered during their investigation.</p> <ul style="list-style-type: none"> • Children will actively participate in discussions and share their research insights with classmates. This collaborative sharing of information will showcase their understanding of Victorian family recipes and foster a collective learning experience.
<p>Lesson 3 – Technical Knowledge</p> <p>Practise and apply a skill/technique</p>	<p>To practise and apply techniques</p> <ul style="list-style-type: none"> • Children will further develop their sewing and joining skills, building on skills acquired in Year 1 and 2. 	<p>To practise and apply techniques</p> <ul style="list-style-type: none"> • Children will further develop cutting and joining techniques learned in KS1 	<p>Lesson 3 – Research</p> <p>Food Hygiene</p>	<p>To understand the importance of food hygiene</p> <ul style="list-style-type: none"> • Children will actively participate in learning proficient food hygiene practices, demonstrating advanced handwashing techniques and understanding the deeper importance of cleanliness to reduce the risk of germs. • Children will distinguish between more complex safe and unsafe food handling practices. They will grasp the importance of maintaining advanced cleanliness in both food and cooking utensils to prevent contamination. • Children will participate in role-playing activities that involve advanced hygienic food preparation

				practices. This may include using aprons, tying back hair, and avoiding facial contact during cooking, showcasing a more nuanced understanding of maintaining a clean cooking environment.
Lesson 4 - Design Design Specification and Design Idea	To create design criteria and final design idea. <ul style="list-style-type: none"> Children will develop advanced design criteria, considering a comprehensive range of factors from research, the Design Brief, and their refined understanding of design principles. Design ideas will showcase a higher level of sophistication, incorporating purpose, functionality, aesthetic appeal, and other relevant criteria. Children will master effective communication of their ideas, utilising a variety of mediums such as detailed drawings and information and communication technology. Communication will become a powerful tool for conveying intricate details and design intentions. 	To create design criteria and final design idea. <ul style="list-style-type: none"> Children will develop advanced design criteria, considering a comprehensive range of factors from research, the Design Brief, and their refined understanding of design principles. Design ideas will showcase a higher level of sophistication, incorporating purpose, functionality, aesthetic appeal, and other relevant criteria. Children will master effective communication of their ideas, utilising a variety of mediums such as detailed drawings and information and communication technology. Communication will become a powerful tool for conveying intricate details and design intentions. 	Lesson 4 – Plan Plan a recipe with instructions, ingredients and equipment.	To plan a recipe based on ingredients used in a family meal in the Victorian era. <ul style="list-style-type: none"> Children will develop a detailed and comprehensive recipe plan based on their research findings. This plan should outline key ingredients, quantities, and preparation steps, showcasing their ability to organise and structure a coherent recipe. Children will integrate historical context into their recipe planning, understanding the societal and cultural factors influencing ingredient choices during the Victorian era, showcasing a deeper comprehension of historical family meals.
Lesson 5 - Make Product manufacture	To manufacture a product. <ul style="list-style-type: none"> Children will refine their ability to select and effectively use a diverse set of tools and equipment for manufacturing, demonstrating increased competence. Children will have the freedom to select from an extensive range of 	To manufacture a product. <ul style="list-style-type: none"> Children will refine their ability to select and effectively use a diverse set of tools and equipment for manufacturing, demonstrating increased competence. Children will have the freedom to select from an extensive range of 	Lesson 5 – Make Make a recipe	To cook a dish using ingredients used in a family meal in the Victorian era. <ul style="list-style-type: none"> Children will effectively cook a dish using ingredients commonly found in family meals

	<p>materials and components, encouraging them to express their creativity and problem-solving skills.</p> <ul style="list-style-type: none"> Children will deepen their understanding of the manufacturing process, incorporating more complex techniques and demonstrating a greater mastery of the tools and materials at their disposal. 	<p>materials and components, encouraging them to express their creativity and problem-solving skills.</p> <ul style="list-style-type: none"> Children will deepen their understanding of the manufacturing process, incorporating more complex techniques and demonstrating a greater mastery of the tools and materials at their disposal. 		<p>during the Victorian era, following their planned recipe and demonstrating practical culinary skills.</p> <ul style="list-style-type: none"> Children will integrate historical insights into their cooking process, understanding the significance of Victorian-era ingredients and techniques in the practical application of their knowledge in the kitchen. Children will present a completed dish that reflects their understanding of Victorian family meals, including attention to taste, presentation, and adherence to historical culinary practices.
<p>Lesson 6 - Evaluate Product evaluation</p>	<p>To evaluate a product against design criteria</p> <ul style="list-style-type: none"> Children will refine their ability to systematically evaluate their manufactured product against a set of well-defined design criteria. Children will actively engage in the feedback process, both giving and receiving constructive feedback from peers, fostering a collaborative and reflective approach to product evaluation. 	<p>To evaluate a product against design criteria</p> <ul style="list-style-type: none"> Children will refine their ability to systematically evaluate their manufactured product against a set of well-defined design criteria. Children will actively engage in the feedback process, both giving and receiving constructive feedback from peers, fostering a collaborative and reflective approach to product evaluation. 	<p>Lesson 6 – Evaluate</p> <p>Final dish evaluation</p>	<p>To evaluate a cooked dish based on a planned recipe inspired by ingredients used in a family meal in the Victorian era.</p> <ul style="list-style-type: none"> Children will conduct a thoughtful evaluation of a cooked dish inspired by a planned recipe from the Victorian era, assessing taste, presentation, and overall satisfaction based on historical culinary principles. Children will articulate their dish evaluations clearly, using age-appropriate language to express

				<p>thoughts on taste, appearance, and how well the dish aligns with the Victorian-era inspiration.</p> <ul style="list-style-type: none"> Children will reflect on the historical authenticity of their cooked dish, considering how well it captures the essence of family meals in the Victorian era, showcasing a deeper understanding of historical context in culinary creations.
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Resources	<p>Fabric, Needles, Embroidery Thread, Scissors, Pins, Fabric Markers, Embellishments (Buttons, Beads, Sequins), Seasonal Design Templates, Hoops for Embroidery, Sewing Machines (optional), Patterns, Seasonal Symbols Reference Materials, Crafting Glue, Irons, Ironing Boards, Fabric Scraps, Reference Books on Textile Techniques, Display Boards, and Seasonal Design Inspiration Images.</p>	<p>Examples of products that use air e.g., pneumatic toys, foot pump for inflating air mattress, balloon pump · washing-up liquid bottles, 5mm diameter plastic tubing, balloons, sterile syringes · construction kits · suitable reclaimed materials, card, plastic sheet · materials for finishing e.g., coloured papers, paint, papier mâché, fabric, foil · PVA glue, masking tape, parcel tape, lower temperature glue gun, pipe-cleaners · scissors, snips</p>	<p>Pictures/images of sandwiches and fillings · a selection of different types of sandwiches · a variety of breads · ingredients suitable for spreads and fillings · plastic table covers, antibacterial cleaner, hand-washing and washing up facilities, aprons · tools and equipment e.g., knives, chopping boards, graters, plates, bowls, plastic film · access to oven</p>
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Year 4

Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

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	Textiles Project - Money Containers	Product Design and Engineering Project – Clocks
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<p>Knowledge Area of focus</p>	<p>To learn how textiles containers e.g., purses, wallets and belt bags are designed for different purposes and different users.</p> <p>Design patterns/templates and join and reinforce fabrics.</p> <p>Develop designing skills when evaluating products and use this information to generate their own ideas and identify design criteria.</p> <p>Communicate their early ideas through modelling with paper or inexpensive fabric, and use decorative techniques e.g., dyeing and embroidery.</p>	<p>To design and make a high-quality clock, having considered effective market research and client design brief to produce a product that follows a design specification closely.</p> <p>To gain an understanding of and use Computer-aided design/manufacture to design a product.</p> <p>To investigate, use and manipulate a number of materials and tools to produce a product.</p>
<p>Skills</p>	<p>To have sufficient understanding and skills in working with textiles</p> <p>To design and make a money container that meets their design criteria</p> <p>To evaluate existing products, test fabrics to choose an appropriate one</p> <p>To have applied decorative techniques appropriately</p>	<p>To develop critical awareness.</p> <p>To learn to communicate alternative ideas effectively.</p> <p>To manufacture a high-quality product against design criteria</p> <p>To learn how to critically evaluate your work using yours & the views of others and suggesting improvements</p>
<p>Vocabulary</p>	<p>designing e.g., user, purpose, design criteria, model, evaluating, labelled drawings, stiffening, reinforcing, coins, notes · making e.g., pattern/templates, strength, weaknesses, accurate, finishing · knowledge and understanding e.g., fabric, fastening, compartment, zip, press stud, clasp, hook and eye, button, buckle, seam, seam allowance, reinforce, gusset, dye, embroidery - properties e.g., strength, hard-wearing, stretch, fray</p>	<p>Resistant Materials, Prototype, Design Brief, Specification, Research, Prototype Testing, Ergonomics, Sustainability, Materials, Computer-aided design, Computer-aided manufacture, Aesthetics, Market Research, Product Analysis, User Feedback, Comparative Analysis, Functionality, Durability, Cost-Effectiveness, Safety Features, Energy Efficiency, Aesthetic Appeal, Innovation, Environmental Impact, Consumer</p>
<p>Concepts</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources including digital technologies, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources including digital technologies, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p>

	<p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • A thorough knowledge of which tools, equipment and materials to use to make their products. • The ability to apply mathematical knowledge. • The ability to manage risks exceptionally well to manufacture products safely and hygienically. 	<p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • A thorough knowledge of which tools, equipment and materials to use to make their products. • The ability to apply mathematical knowledge. • The ability to manage risks exceptionally well to manufacture products safely and hygienically.
	<p><i>Design Brief - To design and manufacture a money container that will be easy to use and keep your money safe. It will be of a reasonable size so that it's easy to carry and store. It will be visually appealing. It will have at least one type of fastening to protect its contents from falling out. It will be made of a suitable, environmentally friendly material. It can be designed for the target market of your choosing, using a 'Pop art' theme.</i></p> <p>To read and understand the Design brief and consider all the possibilities a task could include using ACCESS FM</p> <ul style="list-style-type: none"> • Children will analyse the design brief and identify key criteria from it. • Children will discuss the task ahead, and all areas that their product might need to consider – ACCESS FM. 	<p><i>Design Brief – To design and make a high-quality clock that will be made from acrylic and wood to go in a particular room in your home. The shape of the clock will be based upon a theme of your own choice. The clock may either be free standing or fixed to the wall. The clock should be designed and manufactured utilising the availability of CAD/CAM.</i></p> <p>To read and understand the Design brief and consider all the possibilities a task could include using ACCESS FM</p> <ul style="list-style-type: none"> • Children will analyse the design brief and identify key criteria from it. • Children will discuss the task ahead, and all areas that their product might need to consider – ACCESS FM.
<p>Lesson 2 – Evaluate Research Existing Products – ACCESS FM</p>	<p>To use ACCESS FM to analyse and compare existing products.</p> <ul style="list-style-type: none"> • Children will be given access to a range of existing products. • Children will discuss each product using ACCESS FM • Children will consider their own opinions and the opinions of their peers to evaluate existing products and use their findings to influence their future design decisions. 	<p>To use ACCESS FM to analyse and compare existing products.</p> <ul style="list-style-type: none"> • Children will be given access to a range of existing products. • Children will discuss each product using ACCESS FM • Children will consider their own opinions and the opinions of their peers to evaluate existing products and use their findings to influence their future design decisions.
<p>Lesson 3 – Evaluate Research Design Movement</p>	<p>To research a design movement for inspiration, understanding what a mood board is and how to create one.</p> <ul style="list-style-type: none"> • Children will be able to select from a range of sources and present images creatively and effectively. • Children will prepare stimulus material for design ideas. 	<p>To research a design movement for inspiration, understanding what a mood board is and how to create one.</p> <ul style="list-style-type: none"> • Children will be able to select from a range of sources and present images creatively and effectively. • Children will prepare stimulus material for design ideas.

	<ul style="list-style-type: none"> Children will understand how key events and individuals in design and technology have helped shape the world. 	<ul style="list-style-type: none"> Children will understand how key events and individuals in design and technology have helped shape the world.
Lesson 4 – Design Design Specification	To identify a client's needs and be aware of constraints and success criteria. <ul style="list-style-type: none"> Children will use their research to develop a Design Specification to inform the design of and innovative, functional, appealing product that are fit for purpose, aimed at a target market from the Design Brief. Children will consider ACCESS FM to create a list of design criteria they will follow when generating design ideas. 	To identify a client's needs and be aware of constraints and success criteria. <ul style="list-style-type: none"> Children will use their research to develop a Design Specification to inform the design of and innovative, functional, appealing product that are fit for purpose, aimed at a target market from the Design Brief. Children will consider ACCESS FM to create a list of design criteria they will follow when generating design ideas.
Lesson 5 – Design Initial Design Ideas	To learn to communicate alternative ideas effectively. <ul style="list-style-type: none"> Children will be creative and stretch their imagination to produce a range of initial ideas, using the design brief and research they have undertaken. Children will be confident when expressing ideas. Children will generate and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Children will evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	To learn to communicate alternative ideas effectively. <ul style="list-style-type: none"> Children will be creative and stretch their imagination to produce a range of initial ideas, using the design brief and research they have undertaken. Children will be confident when expressing ideas. Children will generate and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Children will evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
Lesson 6 – Technical Knowledge Understand and apply a skill/technique	To investigate complex structures, mechanical systems and electrical systems <ul style="list-style-type: none"> Children will investigate mechanical/electrical systems and complex structures to apply to their products. Children will use their finding to influence their design decisions when developing their ideas. 	To investigate complex structures, mechanical systems and electrical systems <ul style="list-style-type: none"> Children will investigate mechanical/electrical systems and complex structures to apply to their products. Children will use their finding to influence their design decisions when developing their ideas.
Lesson 7 - Design Idea Development - SCAMPER	To develop ideas through sketching discussion and evaluation. <ul style="list-style-type: none"> Children will use their own research and opinions of others to make informed decisions about their design ideas. Children will use SCAMPER to produce a range of iterative designs. Children will learn how to check and modify as a design develops. Children will develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	To develop ideas through sketching discussion and evaluation. <ul style="list-style-type: none"> Children will use their own research and opinions of others to make informed decisions about their design ideas. Children will use SCAMPER to produce a range of iterative designs. Children will learn how to check and modify as a design develops. Children will develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

<p>Lesson 8 - Design</p> <p>Final Design Idea</p>	<p>To be able to clarify through sketching and discussion to produce an accurate and annotated final solution.</p> <ul style="list-style-type: none"> Children will make a number of final decisions to produce a considered and detailed final product design. Children will communicate their idea through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	<p>To be able to clarify through sketching and discussion to produce an accurate and annotated final solution.</p> <ul style="list-style-type: none"> Children will make a number of final decisions to produce a considered and detailed final product design. Children will communicate their idea through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
<p>Lesson 9 - Make</p> <p>Product Manufacture</p>	<p>To manufacture a high-quality product against design criteria</p> <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process. 	<p>To manufacture a high-quality product against design criteria</p> <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process.
<p>Lesson 10 - Make</p> <p>Product Manufacture</p>	<p>To manufacture a high-quality product against design criteria</p> <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process. 	<p>To manufacture a high-quality product against design criteria</p> <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process.
<p>Lesson 11 - Evaluate</p> <p>Evaluation</p>	<p>To learn how to critically evaluate your work using yours & the views of others and suggesting improvements.</p> <ul style="list-style-type: none"> Children will evaluate their ideas and final products against their own design criteria and consider the views of others to improve their work. Children will consider the success of their projects throughout the design process. 	<p>To learn how to critically evaluate your work using yours & the views of others and suggesting improvements.</p> <ul style="list-style-type: none"> Children will evaluate their ideas and final products against their own design criteria and consider the views of others to improve their work. Children will consider the success of their projects throughout the design process.
<p>Resources</p>	<p>Collection of purses, wallets, belt bags made from different materials, from different cultures, and with a range of fastenings · selection of fabrics e.g., felt, calico, hessian · selection of fastenings used on purses, wallets, and bags · scissors for fabric, thread, tape, needles, fabric glue · materials for decorative techniques e.g., embroidery thread and needles, dye, fabric crayon and paints</p>	<p>Clock Templates, MDF Sheets, Quartz Clock Mechanism, Clock Numerals, Decorative Materials, Adhesive, Safety Equipment (safety goggles, dust mask, hearing protection), Measuring and Marking Tools (tape measure, ruler, pencil, compass or stencil), Cutting Tools (jigsaw or scroll saw, circular saw or table saw, utility knife), Sandpaper and Sanding Block, Drill and Bits, Screwdriver, Painting and Finishing Supplies (brushes, paint or stain, clear varnish or sealant), Clamps, Mounting Hardware (screws, wall anchors, wall hook or bracket)</p>

Year 5

Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

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Textiles Project - Drawstring Bags

Product Design and Engineering Project - Musical Card

**Knowledge
Area of focus**

To develop and apply advanced textile construction techniques, including sewing, stitching, and incorporate different fastening methods, to create durable and functional drawstring bags.

To conceptualise and plan unique drawstring bag designs, focussing on personalisation, enabling students to express their creativity through colour choices, fabric patterns, and embellishments.

To understand the functional aspects of drawstring bags, emphasising the purpose and usability of the final product. Explore how design choices impact the bag's functionality and how to balance aesthetics with practicality in textile design.

To design and make an electronic musical card, having considered effective market research and client design brief to produce a product that follows a design specification closely.

To gain a basic understanding of a simple electronic circuit to design a product.

To understand the role of an integrated circuit in the design of the product.

Skills

To develop critical awareness.

To learn to communicate alternative ideas effectively.

To manufacture a high-quality product against design criteria

To learn how to critically evaluate your work using yours & the views of others and suggesting improvements

To develop critical awareness.

To learn to communicate alternative ideas effectively.

To manufacture a high-quality product against design criteria

To learn how to critically evaluate your work using yours & the views of others and suggesting improvements

Vocabulary

Sewing, Stitching, Fastening Methods, Textile Construction, Drawstring Bags, Design Thinking, Personalization, Creativity, Colour Choices, Fabric Patterns, Embellishments, Functional, Usability, Aesthetics, Practicality, Textile Design, Patterns, Dimensions, Materials, Embroidery, Fabric Selection, Cutting, Crafting, Project Planning.

Prototype, Design Brief, Specification, Research, Prototype Testing, Ergonomics, Sustainability, Materials, Computer-aided design, Computer-aided manufacture, Aesthetics, Market Research, Product Analysis, User Feedback, Comparative Analysis, Functionality, Durability, Cost-Effectiveness, Safety Features, Energy Efficiency, Aesthetic Appeal, Innovation, Environmental Impact, Consumer

<p>Concepts</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources including digital technologies, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely. • A thorough knowledge of which tools, equipment and materials to use to make their products. • The ability to apply mathematical knowledge. • The ability to manage risks exceptionally well to manufacture products safely and hygienically. • A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems. 	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources including digital technologies, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely. • A thorough knowledge of which tools, equipment and materials to use to make their products. • The ability to apply mathematical knowledge. • The ability to manage risks exceptionally well to manufacture products safely and hygienically. • A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems.
<p>Lesson 1 – Design Design Brief & Task Analysis</p>	<p><i>Design Brief – To design and manufacture a drawstring bag that blends functionality with aesthetic appeal. It should provide an innovative solution for carrying essentials or small items. The design should incorporate practical features such as durability, size, and ease of use while also showcasing a visually pleasing and unique design. Additionally, the drawstring bag should be themed for a specific occasion or purpose of the designer's choosing.</i></p>	<p><i>Design Brief – To design and manufacture an electronic greeting card that will be both functional and aesthetically pleasing. It will be designed for an occasion of the designer's choosing, and it will contain a simple electronic circuit that, once completed, plays music.</i></p> <p>To read and understand the Design brief and consider all the possibilities a task could include using ACCESS FM</p>

	<p>To read and understand the Design brief and consider all the possibilities a task could include using ACCESS FM</p> <ul style="list-style-type: none"> Children will analyse the design brief and identify key criteria from it. Children will discuss the task ahead, and all areas that their product might need to consider – ACCESS FM. 	<ul style="list-style-type: none"> Children will analyse the design brief and identify key criteria from it. Children will discuss the task ahead, and all areas that their product might need to consider – ACCESS FM.
<p>Lesson 2 – Evaluate</p> <p>Research Existing Products – ACCESS FM</p>	<p>To use ACCESS FM to analyse and compare existing products.</p> <ul style="list-style-type: none"> Children will be given access to a range of existing products. Children will discuss each product using ACCESS FM Children will consider their own opinions and the opinions of their peers to evaluate existing products and use their findings to influence their future design decisions. 	<p>To use ACCESS FM to analyse and compare existing products.</p> <ul style="list-style-type: none"> Children will be given access to a range of existing products. Children will discuss each product using ACCESS FM Children will consider their own opinions and the opinions of their peers to evaluate existing products and use their findings to influence their future design decisions.
<p>Lesson 3 – Evaluate</p> <p>Research Design Movement</p>	<p>To research a theme for inspiration, understanding what a mood board is and how to create one.</p> <ul style="list-style-type: none"> Children will be able to select from a range of sources and present images creatively and effectively. Children will prepare stimulus material for design ideas. Children will understand how key events and individuals in design and technology have helped shape the world. 	<p>To research a design movement for inspiration, understanding what a mood board is and how to create one.</p> <ul style="list-style-type: none"> Children will be able to select from a range of sources and present images creatively and effectively. Children will prepare stimulus material for design ideas. Children will understand how key events and individuals in design and technology have helped shape the world.
<p>Lesson 4 – Design</p> <p>Design Specification</p>	<p>To identify a client's needs and be aware of constraints and success criteria.</p> <ul style="list-style-type: none"> Children will use their research to develop a Design Specification to inform the design of and innovative, functional, appealing product that are fit for purpose, aimed at a target market from the Design Brief. Children will consider ACCESS FM to create a list of design criteria they will follow when generating design ideas. 	<p>To identify a client's needs and be aware of constraints and success criteria.</p> <ul style="list-style-type: none"> Children will use their research to develop a Design Specification to inform the design of and innovative, functional, appealing product that are fit for purpose, aimed at a target market from the Design Brief. Children will consider ACCESS FM to create a list of design criteria they will follow when generating design ideas.
<p>Lesson 5 – Design</p> <p>Initial Design Ideas</p>	<p>To learn to communicate alternative ideas effectively.</p> <ul style="list-style-type: none"> Children will be creative and stretch their imagination to produce a range of initial ideas, using the design brief and research they have undertaken. Children will be confident when expressing ideas. Children will generate and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	<p>To learn to communicate alternative ideas effectively.</p> <ul style="list-style-type: none"> Children will be creative and stretch their imagination to produce a range of initial ideas, using the design brief and research they have undertaken. Children will be confident when expressing ideas. Children will generate and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

	<ul style="list-style-type: none"> Children will evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	<ul style="list-style-type: none"> Children will evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
Lesson 6 – Technical Knowledge Understand and apply a skill/technique	To investigate complex structures, mechanical systems and electrical systems <ul style="list-style-type: none"> Children will investigate mechanical/electrical systems and complex structures to apply to their products. Children will use their finding to influence their design decisions when developing their ideas. 	To investigate complex structures, mechanical systems and electrical systems <ul style="list-style-type: none"> Children will investigate mechanical/electrical systems and complex structures to apply to their products. Children will use their finding to influence their design decisions when developing their ideas.
Lesson 7 - Design Idea Development - SCAMPER	To develop ideas through sketching discussion and evaluation. <ul style="list-style-type: none"> Children will use their own research and opinions of others to make informed decisions about their design ideas. Children will use SCAMPER to produce a range of iterative designs. Children will learn how to check and modify as a design develops. Children will develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	To develop ideas through sketching discussion and evaluation. <ul style="list-style-type: none"> Children will use their own research and opinions of others to make informed decisions about their design ideas. Children will use SCAMPER to produce a range of iterative designs. Children will learn how to check and modify as a design develops. Children will develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
Lesson 8 - Design Final Design Idea	To be able to clarify through sketching and discussion to produce an accurate and annotated final solution. <ul style="list-style-type: none"> Children will make a number of final decisions to produce a considered and detailed final product design. Children will communicate their idea through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	To be able to clarify through sketching and discussion to produce an accurate and annotated final solution. <ul style="list-style-type: none"> Children will make a number of final decisions to produce a considered and detailed final product design. Children will communicate their idea through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
Lesson 9 - Make Product Manufacture	To manufacture a high-quality product against design criteria <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process. 	To manufacture a high-quality product against design criteria <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process.
Lesson 10 - Make	To manufacture a high-quality product against design criteria <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. 	To manufacture a high-quality product against design criteria <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products.

Product Manufacture	<ul style="list-style-type: none"> Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process. 	<ul style="list-style-type: none"> Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process.
Lesson 11 - Evaluate	To learn how to critically evaluate your work using yours & the views of others and suggesting improvements.	To learn how to critically evaluate your work using yours & the views of others and suggesting improvements.
Evaluation	<ul style="list-style-type: none"> Children will evaluate their ideas and final products against their own design criteria and consider the views of others to improve their work. Children will consider the success of their projects throughout the design process. 	<ul style="list-style-type: none"> Children will evaluate their ideas and final products against their own design criteria and consider the views of others to improve their work. Children will consider the success of their projects throughout the design process.
Resources	Fabric (variety of textures and colours), Sewing Machines, Hand Needles, Threads, Scissors, Cutting Mats, Rulers, Pins, Fasteners (such as buttons or snaps), Drawstrings, Embellishments (beads, patches, embroidery floss), Irons, Ironing Boards, Pattern Templates, Fabric Markers or Pencils, Instructional Guides on Sewing and Textile Techniques, Reference Books on Textile Design, Safety Pins, Storage Containers for Materials.	Integrated Circuit (IC) Chip, Adhesive Copper Tape, Piezo Speaker, Battery, Battery Holder, Cardstock or Paper, Decorative Materials, Adhesive, Soldering Iron, Safety Equipment, Scissors or Craft Knife, Ruler and Pencil, Double-Sided Tape or Glue, Hole Punch, Wire Strippers and Wire Cutters, Small Screwdriver or Pliers

Year 6

Design and Technology is an inspiring, rigorous, and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing, and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising, and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth, and well-being of the nation.

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	Textiles Project – Leavers T-Shirts	Product Design and Engineering Project – Fairground Rides
Knowledge Area of focus	To explore various textile printing techniques such as screen printing, block printing, or heat transfer methods, and understand the process of transferring designs onto fabric.	To gain understanding of an important mechanism, using belts and pulleys, and to learn more about control using electricity and an electric motor. Children to be introduced to computer control.

	<p>To focus on graphic design principles and software tools to create visually appealing and personalised designs for School Leavers' t-shirts, and learn about layout, colour schemes, and typography.</p> <p>To acquire knowledge about different fabric types suitable for t-shirts and their properties, and understand garment construction techniques, including pattern cutting and sewing.</p>	<p>To design and make a model of a fairground ride but it could be adapted to suit any product in which an electric motor produces rotating movement.</p>
Skills	<p>To develop proficiency in textile printing techniques, mastering skills in creating high-quality prints on fabrics.</p> <p>To acquire graphic design skills, including proficiency with design software, to create visually appealing and personalised designs for the School Leavers' t-shirts.</p> <p>To develop skills in fabric manipulation, pattern cutting, and sewing to bring a designed graphic to life.</p> <p>To work as a team and communicate effectively to collaborate on a design and production of School Leavers' t-shirts.</p>	<p>To become familiar with how an electric motor behaves when connected in an electrical circuit.</p> <p>To generate several ideas to choose from.</p> <p>To harness the rotation produced by the motor to drive a moving part on a model they have made, employing belts and pulleys.</p> <p>To design, make, evaluate and modify their ride and linked it to computer control.</p>
Vocabulary	<p>Sublimation Printing, Textile Printing, Screen Printing, Block Printing, Heat Transfer, Graphic Design, Layout, Colour Coordination, Typography, Fabric Selection, Garment Construction, Pattern Cutting, Sewing, Proficiency, Personalized Designs, Visual Appeal, Fabric Manipulation, Precision, Attention to Detail, Collaboration, Communication, Teamwork, School Leavers, Celebratory, Identity, Commemorative, Software Tools, Ink, Design Software.</p>	<p>Resistant Materials, Prototype, Design Brief, Specification, Research, Prototype Testing, Ergonomics, Sustainability, Materials, Computer-aided design, Computer-aided manufacture, Aesthetics, Market Research, Product Analysis, User Feedback, Comparative Analysis, Functionality, Durability, Cost-Effectiveness, Safety Features, Energy Efficiency, Aesthetic Appeal, Innovation, Environmental Impact, Consumer, Model, mock-up, select, modify, improvements, design proposal, criteria · making e.g. framework, construct, temporary joins, permanent joins · knowledge and understanding e.g. rotation, spindle, axle, drive belt, pulley, electric motor, speed, framework, horizontal, vertical, electric circuit, switch, gearing up or down, computer control, mechanism</p>
Concepts	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a</p>	<p>Children will learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a</p>

	<p>variety of resources including digital technologies, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely. • A thorough knowledge of which tools, equipment and materials to use to make their products. • The ability to apply mathematical knowledge. • The ability to manage risks exceptionally well to manufacture products safely and hygienically. • A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems. 	<p>variety of resources including digital technologies, to improve the world around them</p> <p>Children will develop skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.</p> <p>Children will be encouraged to be creative and think about important issues</p> <p>Children will learn to use tools and machines that may be used to solve real-world problems.</p> <p>Children will be encouraged to learn</p> <ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely. • A thorough knowledge of which tools, equipment and materials to use to make their products. • The ability to apply mathematical knowledge. • The ability to manage risks exceptionally well to manufacture products safely and hygienically. • A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems.
<p>Lesson 1 – Design</p> <p>Design Brief & Task Analysis</p>	<p><i>Design Brief - To design and manufacture a school leavers' T-shirts using sublimation printing and a Computer-aided Design package. The design should seamlessly integrate sublimation printing techniques, allowing for vibrant and long-lasting prints that capture the spirit of camaraderie and achievement. Considerations should be given to colour schemes, graphics, and any specific symbols or messages that hold significance to the graduating class.</i></p> <p>To read and understand the Design brief and consider all the possibilities a task could include using ACCESS FM</p>	<p><i>Design Brief - To design and manufacture a scale model of a fairground ride with a rotating part. Your model must be self-supporting, contain at least one type of electrical component e.g., a motor, be visually appealing and can be designed around the theme of your choosing. You can also decide who your target market for your product is.</i></p> <p>To read and understand the Design brief and consider all the possibilities a task could include using ACCESS FM</p> <ul style="list-style-type: none"> • Children will analyse the design brief and identify key criteria from it.

	<ul style="list-style-type: none"> Children will analyse the design brief and identify key criteria from it. Children will discuss the task ahead, and all areas that their product might need to consider – ACCESS FM. 	<ul style="list-style-type: none"> Children will discuss the task ahead, and all areas that their product might need to consider – ACCESS FM.
Lesson 2 – Evaluate Research Existing Products – ACCESS FM	To use ACCESS FM to analyse and compare existing products. <ul style="list-style-type: none"> Children will be given access to a range of existing products. Children will discuss each product using ACCESS FM Children will consider their own opinions and the opinions of their peers to evaluate existing products and use their findings to influence their future design decisions. 	To use ACCESS FM to analyse and compare existing products. <ul style="list-style-type: none"> Children will be given access to a range of existing products. Children will discuss each product using ACCESS FM Children will consider their own opinions and the opinions of their peers to evaluate existing products and use their findings to influence their future design decisions.
Lesson 3 – Evaluate Research Design Movement	To research a design movement for inspiration, understanding what a mood board is and how to create one. <ul style="list-style-type: none"> Children will be able to select from a range of sources and present images creatively and effectively. Children will prepare stimulus material for design ideas. Children will understand how key events and individuals in design and technology have helped shape the world. 	To research a design movement for inspiration, understanding what a mood board is and how to create one. <ul style="list-style-type: none"> Children will be able to select from a range of sources and present images creatively and effectively. Children will prepare stimulus material for design ideas. Children will understand how key events and individuals in design and technology have helped shape the world.
Lesson 4 – Design Design Specification	To identify a client's needs and be aware of constraints and success criteria. <ul style="list-style-type: none"> Children will use their research to develop a Design Specification to inform the design of an innovative, functional, appealing product that are fit for purpose, aimed at a target market from the Design Brief. Children will consider ACCESS FM to create a list of design criteria they will follow when generating design ideas. 	To identify a client's needs and be aware of constraints and success criteria. <ul style="list-style-type: none"> Children will use their research to develop a Design Specification to inform the design of an innovative, functional, appealing product that are fit for purpose, aimed at a target market from the Design Brief. Children will consider ACCESS FM to create a list of design criteria they will follow when generating design ideas.
Lesson 5 – Design Initial Design Ideas	To learn to communicate alternative ideas effectively. <ul style="list-style-type: none"> Children will be creative and stretch their imagination to produce a range of initial ideas, using the design brief and research they have undertaken. Children will be confident when expressing ideas. Children will generate and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Children will evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	To learn to communicate alternative ideas effectively. <ul style="list-style-type: none"> Children will be creative and stretch their imagination to produce a range of initial ideas, using the design brief and research they have undertaken. Children will be confident when expressing ideas. Children will generate and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Children will evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

<p>Lesson 6 – Technical Knowledge</p> <p>Understand and apply a skill/technique</p>	<p>To investigate complex structures, mechanical systems and electrical systems</p> <ul style="list-style-type: none"> Children will investigate mechanical/electrical systems and complex structures to apply to their products. Children will use their finding to influence their design decisions when developing their ideas. 	<p>To investigate complex structures, mechanical systems and electrical systems</p> <ul style="list-style-type: none"> Children will investigate mechanical/electrical systems and complex structures to apply to their products. Children will use their finding to influence their design decisions when developing their ideas.
<p>Lesson 7 - Design</p> <p>Idea Development - SCAMPER</p>	<p>To develop ideas through sketching discussion and evaluation.</p> <ul style="list-style-type: none"> Children will use their own research and opinions of others to make informed decisions about their design ideas. Children will use SCAMPER to produce a range of iterative designs. Children will learn how to check and modify as a design develops. Children will develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	<p>To develop ideas through sketching discussion and evaluation.</p> <ul style="list-style-type: none"> Children will use their own research and opinions of others to make informed decisions about their design ideas. Children will use SCAMPER to produce a range of iterative designs. Children will learn how to check and modify as a design develops. Children will develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
<p>Lesson 8 - Design</p> <p>Final Design Idea</p>	<p>To be able to clarify through sketching and discussion to produce an accurate and annotated final solution.</p> <ul style="list-style-type: none"> Children will make a number of final decisions to produce a considered and detailed final product design. Children will communicate their idea through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	<p>To be able to clarify through sketching and discussion to produce an accurate and annotated final solution.</p> <ul style="list-style-type: none"> Children will make a number of final decisions to produce a considered and detailed final product design. Children will communicate their idea through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
<p>Lesson 9 - Make</p> <p>Product Manufacture</p>	<p>To manufacture a high-quality product against design criteria</p> <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process. 	<p>To manufacture a high-quality product against design criteria</p> <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. Children will record a production diary, detailing the manufacturing process.
<p>Lesson 10 - Make</p> <p>Product Manufacture</p>	<p>To manufacture a high-quality product against design criteria</p> <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. 	<p>To manufacture a high-quality product against design criteria</p> <ul style="list-style-type: none"> Children will select from and use a wide range of tools and equipment to accurately manufacture their products. Children will select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities.

	<ul style="list-style-type: none"> Children will record a production diary, detailing the manufacturing process. 	<ul style="list-style-type: none"> Children will record a production diary, detailing the manufacturing process.
Lesson 11 - Evaluate Evaluation	To learn how to critically evaluate your work using yours & the views of others and suggesting improvements. <ul style="list-style-type: none"> Children will evaluate their ideas and final products against their own design criteria and consider the views of others to improve their work. Children will consider the success of their projects throughout the design process. 	To learn how to critically evaluate your work using yours & the views of others and suggesting improvements. <ul style="list-style-type: none"> Children will evaluate their ideas and final products against their own design criteria and consider the views of others to improve their work. Children will consider the success of their projects throughout the design process.
Resources	Screen Printing Kits, Block Printing Supplies, Heat Transfer Paper, Fabric Paints, Printing Screens, Squeegees, Graphic Design Software (e.g., Adobe Illustrator), Computers or Tablets for Design Work, Fabric Samples for Testing, T-shirts (various sizes and colours), Sewing Machines, Fabric Scissors, Cutting Mats, Rulers, Pins, Irons, Ironing Boards, Pattern Templates, Embroidery or Appliqué Materials, Instructional Guides on Textile Printing and Graphic Design, Reference Books on Fabric Selection and Garment Construction, Safety Equipment for Printing (gloves, aprons).	Batteries, motors with small pulleys to fit, elastic bands (up to 20 cm), switches, crocodile connecting leads, aluminium foil · construction kit components including pulleys, pulley wheels · cotton reels · wood scraps which might be used as a base · construction material suitable for making a framework i.e. wood strips and card corners OR card boxes · doweling or stiff wire for making spindles or axles · variety of materials for making the rides e.g. card, reclaimed materials · assorted paper, ribbon, string, elastic bands, paper plates, adhesive, sticky tape, saws, drills and bits · tools for cutting and shaping the above materials · computer and interface connection

Food Technology & History Week – Year 4-6

Design and Technology is an inspiring, rigorous, and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing, and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising, and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth, and well-being of the nation.

Intent: To build on the National Curriculum by adapting and extending to suit our children. An inspiring and exciting curriculum ensures that Bushey Heath provides a Design Technology curriculum which is as rigorously applied as core.

Concepts

- Children will learn about the importance of a balanced diet and the different food groups. They may explore the nutritional value of various foods and understand the role of vitamins, minerals, and other nutrients in maintaining good health.
- Children will be introduced to basic cooking skills and techniques. This may include chopping, slicing, dicing, grating, peeling, and using various kitchen utensils safely. They might also learn about different cooking methods like baking, boiling, frying, and grilling.
- Children will understand the importance of food hygiene and safety. Children learn about the significance of washing hands, keeping the kitchen clean, and handling food safely to prevent contamination and foodborne illnesses.

- Children will learn how to follow recipes and measure ingredients accurately. This helps develop their mathematical and organizational skills, as well as their ability to follow sequential instructions.
- Children will explore where different foods come from, how they are grown or produced, and the concept of seasonal eating. Understanding the environmental impact of food choices may also be part of the curriculum.
- Children will be exposed to a variety of cuisines from different cultures, promoting an awareness and appreciation of diversity in food. This may include learning about traditional dishes and customs related to food in various parts of the world.
- Children will learn about the importance of presenting food attractively. This involves developing creativity in arranging and garnishing dishes
- Children will evaluate their own work and the work of their peers. Reflecting on the taste, texture, and appearance of dishes helps develop their critical thinking skills.
- Children will learn about sustainable food practises, such as reducing food waste, making environmentally conscious food choices, and understanding the impact of food production on the planet.

	Year 4	Year 5	Year 6
	Roman Banquets: Rich or poor?	Vikings: The Conqueror's Diet.	World War 2: War Time Rationing
Knowledge Area of focus	To explore ancient Roman culinary traditions to develop practical skills and knowledge in crafting a savoury snack with historical inspiration.	To explore Viking history, this focusing on the creation of a savoury snack inspired by Norse traditions, fostering practical skills and historical knowledge.	To explore the era of World War II rationing concentrating on the resourceful creation of a cake using ingredients typical of wartime restrictions, fostering an understanding of historical constraints while honing practical baking skills.
Skills	<ul style="list-style-type: none"> • Children will learn how to handle knives safely and develop basic cutting and chopping skills. This includes using knives to slice, dice, and chop ingredients. • Children will practice accurate measuring and weighing of ingredients using kitchen tools such as measuring cups, spoons, and kitchen scales. This helps them follow recipes precisely. • Children will be introduced to various cooking techniques, including baking, boiling, frying, grilling, and steaming. They learn how to apply these techniques to different types of food. • Children will develop good hygiene practices in the kitchen, including proper handwashing, cleaning surfaces, and 	<ul style="list-style-type: none"> • Children will learn how to handle knives safely and develop basic cutting and chopping skills. This includes using knives to slice, dice, and chop ingredients. • Children will practice accurate measuring and weighing of ingredients using kitchen tools such as measuring cups, spoons, and kitchen scales. This helps them follow recipes precisely. • Children will be introduced to various cooking techniques, including baking, boiling, frying, grilling, and steaming. They learn how to apply these techniques to different types of food. • Children will develop good hygiene practices in the kitchen, including proper handwashing, cleaning surfaces, and handling food safely to prevent contamination. 	<ul style="list-style-type: none"> • Children will learn how to handle knives safely and develop basic cutting and chopping skills. This includes using knives to slice, dice, and chop ingredients. • Children will practice accurate measuring and weighing of ingredients using kitchen tools such as measuring cups, spoons, and kitchen scales. This helps them follow recipes precisely. • Children will be introduced to various cooking techniques, including baking, boiling, frying, grilling, and steaming. They learn how to apply these techniques to different types of food. • Children will develop good hygiene practices in the kitchen, including proper handwashing, cleaning surfaces, and handling food safely to prevent contamination.

	<p>handling food safely to prevent contamination.</p>	<ul style="list-style-type: none"> • Children will learn how to read and follow recipes independently. This involves understanding cooking terminology, interpreting instructions, and executing steps in the correct order. • Children will develop organisational skills by planning and managing their time effectively during cooking activities. This includes preparing ingredients in advance and coordinating multiple tasks. 	<ul style="list-style-type: none"> • Children will learn how to read and follow recipes independently. This involves understanding cooking terminology, interpreting instructions, and executing steps in the correct order. • Children will develop organisational skills by planning and managing their time effectively during cooking activities. This includes preparing ingredients in advance and coordinating multiple tasks. • Children will be encouraged to modify recipes or experiment with ingredients to develop their creativity and adapt recipes to personal preferences
<p>Vocabulary</p>	<p>Roman-age Ingredients:</p> <ul style="list-style-type: none"> • Spelt flour • Olive oil • Feta cheese • Olives • Garum (fermented fish sauce) • Fresh herbs (such as rosemary or thyme) • Sea salt <p>Roman Culinary Techniques:</p> <ul style="list-style-type: none"> • Kneading • Mixing • Folding • Sifting • Roasting • Frying <p>Roman-Inspired Seasonings:</p> <ul style="list-style-type: none"> • Garum (fermented fish sauce) • Sea salt • Fresh herbs 	<p>Nordic Ingredients:</p> <ul style="list-style-type: none"> • Barley flour • Smoked fish (such as herring) • Butter • Root vegetables (turnips, carrots) • Dill • Pickled vegetables • Sea salt <p>Viking Culinary Techniques:</p> <ul style="list-style-type: none"> • Smoking • Pickling • Baking • Grilling • Roasting <p>Nordic Seasonings:</p> <ul style="list-style-type: none"> • Dill • Sea salt • Smoked flavours <p>Traditional Viking Tools:</p>	<p>Rationed Ingredients:</p> <ul style="list-style-type: none"> • Powdered egg substitute • Margarine • Oat flour • Carrots • Potatoes • Canned fish (such as sardines) • Dehydrated vegetables • Spam or other canned meats <p>Wartime Culinary Techniques:</p> <ul style="list-style-type: none"> • Substituting ingredients • Stretching recipes • Minimal cooking times • Preserving methods (canning, drying) <p>Rationing-Approved Seasonings:</p> <ul style="list-style-type: none"> • Salt • Pepper • Dried herbs • Bouillon cubes (for flavour)

- Olive oil

Ancient Roman Tools:

- Mixing bowl
- Wooden spoon
- Rolling pin
- Cutting board
- Measuring cups
- Measuring spoons

Kitchen Safety in Ancient Times:

- Handwashing practices
- Clean preparation surfaces

Roman Recipe Elements:

- Ancient Roman-inspired recipe
- Step-by-step instructions
- Ingredients list

Nutrition in Roman Times:

- Grains (spelt)
- Dairy (feta cheese)
- Olive oil (fats)
- Balanced ancient diet

Presentation in Roman Style:

- Plating with an ancient touch
- Garnishing with herbs
- Simple decorating inspired by Roman aesthetics

Roman Cooking Techniques:

- Roasting
- Frying

- Wooden mixing bowl
- Wooden spoon
- Baking stone or hearth
- Grilling grate
- Cutting board
- Measuring horn (replica)

Viking Kitchen Safety:

- Handwashing practices
- Safe fire and hearth use

Norse Recipe Elements:

- Viking-inspired recipe
- Step-by-step instructions
- Ingredients list

Viking Nutrition:

- Barley (grains)
- Fish (protein)
- Butter (fats)
- Root vegetables (carbs)
- Balanced Viking diet

Presentation in Viking Style:

- Rustic plating
- Simple garnishing with herbs
- Wooden or earthenware serving

Norse Cooking Techniques:

- Smoking
- Grilling
- Baking on a stone or hearth

Culinary Concepts Inspired by Vikings:

Vintage Cooking Tools:

- Simple mixing bowl
- Wooden spoon
- Hand-cranked food processor (if available)
- Minimalist measuring tools
- Rationing-friendly cooking utensils

Wartime Kitchen Safety:

- Conservation of resources
- Minimal water usage
- Safe use of preserved ingredients

Rationing-Inspired Recipe Elements:

- Wartime-inspired recipe
- Practical instructions
- Rationed ingredients list

Nutrition in Wartime:

- Nutrient-dense ingredients
- Making the most of limited resources
- Balanced wartime diet

Presentation in Vintage Style:

- Utilitarian plating
- Simple garnishing with available herbs
- Wartime-themed serving dish (if applicable)

1940s Cooking Techniques:

- Boiling
- Baking with minimal fat
- One-pot meals
- Canning for preservation

	<ul style="list-style-type: none"> • Simmering (if applicable to the snack) <p>Culinary Concepts Inspired by Ancient Rome:</p> <ul style="list-style-type: none"> • Roman culinary traditions • Historical influences on flavours • Ancient Roman snacks and appetizers <p>Sustainability in Ancient Cooking:</p> <ul style="list-style-type: none"> • Ancient conservation methods • Use of local and seasonal ingredients <p>Roman Taste and Texture:</p> <ul style="list-style-type: none"> • Savoury • Balanced flavours • Crispy or crunchy (depending on the snack) <p>Historical Food Supply Chain:</p> <ul style="list-style-type: none"> • Sourcing ingredients in ancient times • Ancient methods of food production • Packaging and storage practices 	<ul style="list-style-type: none"> • Norse culinary traditions • Historical influences on flavours • Viking-age snacks and sustenance <p>Sustainability in Norse Cooking:</p> <ul style="list-style-type: none"> • Utilization of local and seasonal ingredients • Viking-age preservation methods <p>Viking Taste and Texture:</p> <ul style="list-style-type: none"> • Savoury and robust • Smoky or grilled flavours • Hearty and filling <p>Historical Food Supply Chain:</p> <ul style="list-style-type: none"> • Sourcing ingredients in Viking times • Viking methods of food production • Preservation and storage practices in the Norse era 	<p>Culinary Concepts Inspired by WWII:</p> <ul style="list-style-type: none"> • Wartime culinary adaptations • Historical influences on flavours • Resourceful wartime snacks <p>Sustainability in Wartime Cooking:</p> <ul style="list-style-type: none"> • Thriftiness in ingredient usage • Wartime food preservation methods <p>Wartime Taste and Texture:</p> <ul style="list-style-type: none"> • Savoury and hearty • Practical and filling • Creative use of limited ingredients <p>Historical Food Supply Chain:</p> <ul style="list-style-type: none"> • Rationed ingredient distribution • Community and home gardens • Creative solutions for food scarcity
<p>Lesson 1 – Research</p> <p>(Ingredients)</p>	<p>To research ingredients and foods eaten by the Romans.</p> <ul style="list-style-type: none"> • Children will be introduced to the concept of historical cooking inspired by the Romans. • Children will identify basic Roman ingredients like flour, olive oil, and herbs. • Children will gain awareness of simple culinary techniques such as mixing and baking. • Children will explore how Romans used basic tools like mixing bowls and wooden spoons. 	<p>To research ingredients and foods eaten by the Vikings</p> <ul style="list-style-type: none"> • Children will delve deeper into Viking cuisine, understanding not only the key ingredients but also their historical significance and usage. • Children will connect Viking foods to broader historical contexts, such as trade and cultural influences. • Children will delve deeper into Viking cuisine, understanding not only the key ingredients but also their historical significance and usage. 	<p>To research rationed ingredients during WW2.</p> <ul style="list-style-type: none"> • Children will have a thorough understanding of rationing during World War II, including a comprehensive list of rationed ingredients and the profound impact on dietary practices. • Children will critically analyse and evaluate various sources to build a nuanced understanding of the challenges faced by individuals during wartime rationing. • Children will engage in critical discussions, evaluating the reliability of sources and

		<ul style="list-style-type: none"> Children will connect Viking foods to broader historical contexts, such as trade and cultural influences. 	reflecting on the complexities of rationing and its impact on people's lives during the wartime era.
Lesson 2 – Research (Recipes)	To learn a range of Roman recipes. <ul style="list-style-type: none"> Children will be introduced to the idea of learning a range of Roman recipes, beginning to explore the variety of foods in Roman culinary traditions. Children will grasp the basics of selecting and identifying a few distinct Roman recipes. Children will share their experiences and learning through basic discussions and simple presentations, demonstrating a basic understanding of Roman recipes. 	To learn a range of Viking food recipes <ul style="list-style-type: none"> Children will delve deeper into learning a range of Roman recipes, understanding the diversity and cultural significance of these dishes. Children will actively select and identify at least three distinct recipes representative of Roman culinary traditions. Children will present their chosen recipes through more detailed and structured presentations, showcasing their understanding of the cultural aspects of Roman culinary traditions. 	To learn a range of war time cake recipes <ul style="list-style-type: none"> Children will have a thorough understanding of a range of World War II wartime cake recipes, recognizing the historical and cultural contexts behind each adaptation. Children will demonstrate advanced skills in selecting and identifying at least three distinct recipes that reflect the constraints and adaptations made during World War II. Children will conduct in-depth research to ensure their chosen recipes align with historical accuracy, considering the limited availability of ingredients and creative substitutions characteristic of baking during World War II.
Lesson 3 – Research (Hygiene)	To understand the importance of food hygiene <ul style="list-style-type: none"> Children will begin to grasp the importance of food hygiene through practical activities like consistent handwashing, using appropriate utensils, and maintaining clean workspaces during food technology activities. Children will develop basic awareness of personal hygiene and its connection to food safety. Children will share their experiences and learning through basic discussions, showcasing their basic understanding of the importance of food hygiene. 	To understand the importance of food hygiene <ul style="list-style-type: none"> Children will delve deeper into understanding the importance of food hygiene, articulating key principles like avoiding cross-contamination, proper ingredient storage, and using clean cooking utensils. Children will connect these principles to broader concepts of personal and public health. Children will present their understanding of key food hygiene principles through more detailed discussions and possibly small group presentations. 	To understand the importance of food hygiene <ul style="list-style-type: none"> Children will have a thorough understanding of the importance of food hygiene, articulating key principles confidently and comprehensively. Children will connect these principles to broader societal impacts, understanding how proper food hygiene contributes to public health. Children will present their comprehensive understanding of food hygiene principles through detailed reports or presentations, showcasing their ability to articulate and apply these concepts. Children will participate in critical discussions, evaluating the broader societal impact of practicing good food hygiene and demonstrating an

			advanced understanding of its importance.
Lesson 4 – Plan	<p>To design a savoury snack inspired by the Romans.</p> <ul style="list-style-type: none"> • Children will begin to demonstrate their understanding of Roman culinary influences by designing a simple savoury snack that incorporates basic ingredients and cooking methods reflective of ancient Roman cuisine. • Children will showcase creativity and a basic awareness of historical elements in their designed snacks. • Children will present their designed savoury snacks through simple visuals or descriptions, showcasing a basic understanding of the inspiration drawn from Roman culinary traditions. 	<p>To design a savoury snack inspired by the Vikings.</p> <ul style="list-style-type: none"> • Children will delve deeper into demonstrating their understanding of Roman culinary influences, designing a savoury snack with more complexity, and incorporating key ingredients and cooking methods reflective of ancient Roman cuisine. • Children will showcase enhanced creativity and a more nuanced historical awareness in their designed snacks. • Children will present their designed savoury snacks using more detailed visuals or descriptions, emphasizing the inspiration drawn from Roman culinary traditions with a greater historical context. 	<p>To design a wartime cake using ingredients available during rationing.</p> <ul style="list-style-type: none"> • Children will have a thorough understanding of the constraints during World War II rationing, designing a sophisticated wartime cake that intricately incorporates key ingredients available and allowed during that era. • Children will showcase advanced creativity and a deep historical awareness in their designed wartime cakes. • Children will present their designed wartime cakes through comprehensive visuals or descriptions, emphasizing the inspiration drawn from the historical context of World War II rationing with detailed historical context.
Lesson 5 – Make	<p>To create a savoury snack inspired by the Romans</p> <ul style="list-style-type: none"> • Children will thoughtfully select ingredients for their savoury snacks, considering the historical context of Roman cuisine and ensuring authenticity by aligning with ingredients available during ancient Roman times. • Children will apply basic cooking techniques inspired by ancient Roman methods, showcasing a foundational understanding of traditional approaches to enhance the flavour and presentation of their savoury snacks. • Children will create savoury snacks that embody the essence of Roman culinary influences. Their creations will not only align with historical accuracy but also demonstrate attention to taste and presentation, allowing peers to 	<p>To create a savoury snack inspired by the Vikings.</p> <ul style="list-style-type: none"> • Children will thoughtfully choose ingredients for their savoury snacks, ensuring a deeper understanding of the historical context of Viking cuisine and aligning with ingredients available during ancient Norse times. • Children will apply more advanced cooking techniques inspired by ancient Norse methods, showcasing a nuanced understanding of traditional approaches to enhance the flavour and presentation of their savoury snacks. • Children will create savoury snacks that not only capture the essence of Viking culinary influences but also exhibit advanced attention to taste and presentation. Peers will experience the 	<p>To create a wartime cake using ingredients available during rationing.</p> <ul style="list-style-type: none"> • Children will strategically choose ingredients for their wartime cakes, displaying a thorough understanding of the constraints of World War II rationing and ensuring authenticity by aligning with the limited availability of items during that period. • Children will master creative substitutions for rationed ingredients, showcasing an advanced understanding of resourcefulness and how individuals adapted their baking practices during wartime. • Children will create wartime cakes that not only authentically adhere to rationing constraints but also exemplify meticulous attention to taste and presentation. Peers

	experience the historical inspiration through both visual and sensory aspects of the final product.	historical inspiration through both visual and sensory aspects of the final product.	will have a comprehensive experience of the historical challenges and innovations associated with baking during World War II through both visual and sensory aspects of the final product.
Lesson 6 – Evaluate	<p>To evaluate a created Roman snack based on design criteria, picking out good points and improvement points</p> <ul style="list-style-type: none"> Children will begin to apply critical evaluation skills to assess their created Roman snacks based on predetermined design criteria, showcasing the ability to analyse and reflect on both positive aspects and areas for improvement. Children will identify and articulate the positive aspects of their Roman snacks, emphasizing successful design elements, adherence to historical accuracy, and overall creativity in bringing the concept to fruition. Children will provide constructive feedback by identifying specific areas for improvement in their snacks. They will showcase an ability to recognize and communicate opportunities for enhancing taste, presentation, or alignment with historical context in future iterations. 	<p>To evaluate a created Viking snack based on design criteria, picking out good points and improvement points</p> <ul style="list-style-type: none"> Children will effectively apply critical evaluation skills to assess their created Viking snacks based on predetermined design criteria, showcasing advanced abilities in analysing and reflecting on both positive aspects and areas for improvement. Children will identify and articulate the positive aspects of their Viking snacks with more depth, highlighting not only successful design elements but also showcasing a nuanced understanding of adherence to historical accuracy and overall creativity. Children will provide nuanced constructive feedback by identifying specific areas for improvement in their snacks. They will demonstrate an advanced ability to recognize and communicate opportunities for enhancing taste, presentation, or alignment with historical context in future iterations. 	<p>To evaluate a war time cake based on design criteria, picking out good points and improvement points</p> <ul style="list-style-type: none"> Children will exhibit advanced skills in critical evaluation to assess their created wartime cakes based on predetermined design criteria. They will showcase a high level of proficiency in analysing and reflecting on both positive aspects and areas for improvement. Children will identify and articulate the positive aspects of their wartime cakes with depth and precision, emphasizing successful design elements, creative use of rationed ingredients, and overall adherence to historical accuracy with sophistication. Children will provide expert constructive feedback by identifying specific areas for improvement in their wartime cakes. They will demonstrate an expert ability to recognize and communicate opportunities for enhancing taste, presentation, or alignment with the challenges faced during World War II rationing.
Resources	<p>Ingredients and Foods:</p> <ul style="list-style-type: none"> Olive oil Barley Wheat Grapes Honey Fish sauce (garum) Olives Figs 	<p>Ingredients and Foods:</p> <ul style="list-style-type: none"> Flour Oats Barley Honey Apples Berries Root vegetables (e.g., carrots, turnips) Game meat 	<p>Ingredients and Substitutes:</p> <ul style="list-style-type: none"> Flour Sugar Margarine or shortening Powdered egg substitute or dried eggs Dried milk Baking powder Cocoa (if available)

- Various herbs and spices
- Vegetables (e.g., leeks, onions)

Cooking Tools and Utensils:

- Mixing bowls
- Wooden spoons
- Rolling pins
- Cutting boards
- Measuring cups and spoons
- Baking sheets or trays
- Oven
- Knives suitable for children
- Whisks
- Pastry brushes
- Cooking skewers

Educational Resources:

- Printed information or images about Roman culinary traditions
- Educational videos or presentations
- Recipes inspired by ancient Roman cuisine
- Aprons
- Oven mitts
- Kitchen towels
- Handwashing facilities or hand sanitizers
- Plates
- Decorative items for plating
- Educational games or activities
- Quizzes or worksheets
- Teacher guides
- Safety guidelines
- Information on the historical context of Roman food
- Communication to parents

Cleaning and Hygiene Supplies:

- Fish
- Herbs
- Spices

Cooking Tools and Utensils:

- Mixing bowls
- Wooden spoons
- Rolling pins
- Cutting boards
- Knives suitable for children
- Whisks
- Baking sheets or trays
- Oven
- Cauldron or pot for stewing
- Clay or stone utensils
- Shields or wooden plates for serving

Educational Resources:

- Printed information or images about Viking culinary traditions
- Educational videos or presentations
- Recipes inspired by Norse cuisine
- Aprons
- Oven mitts
- Kitchen towels
- Handwashing facilities or hand sanitizers
- Plates
- Decorative items for plating
- Educational games or activities
- Quizzes or worksheets
- Teacher guides
- Safety guidelines
- Information on the historical context of Viking food
- Communication to parents

Cleaning and Hygiene Supplies:

- Raisins or dried fruits
- Molasses or syrup
- Tea or coffee essence (as a flavour substitute)

Cooking Tools and Utensils:

- Mixing bowls
- Wooden spoons
- Measuring cups and spoons
- Baking pans
- Oven

Educational Resources:

- Rationing recipe guides
- Educational materials on World War II rationing
- Printed information or images about wartime baking
- Aprons
- Oven mitts
- Kitchen towels
- Handwashing facilities or hand sanitizers
- Plates
- Decorative items for presentation
- Educational games or activities
- Quizzes or worksheets
- Teacher guides
- Safety guidelines
- Information on the historical context of WWII rationing
- Communication to parents

Cleaning and Hygiene Supplies:

- Dish soap
- Sponges or dishcloths
- Bin bags

	<ul style="list-style-type: none">• Dish soap• Sponges or dishcloths• Bin bags <p>Optional Extras:</p> <ul style="list-style-type: none">• Costumes or props• Guest speakers or volunteers with knowledge of Roman history or cuisine	<ul style="list-style-type: none">• Dish soap• Sponges or dishcloths• Bin bags <p>Optional Extras:</p> <ul style="list-style-type: none">• Viking-themed props or artifacts• Guest speakers or volunteers with knowledge of Norse history or cuisine	
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